



12 November 2024

Mr. Mothibi Ramusi
Chairperson
Independent Communications Authority of South Africa
Private Bag X10,
Highveld Park 0169
Centurion, Pretoria

ATTN:
Mr. Mandla Mchunu
satlicensing@icasa.org.za

RE: SpaceX response to ICASA Consultation on Proposed New Licensing Framework for Satellite Services

Dear Sir:

SpaceX Internet Services South Africa (PTY) Ltd. (SpaceX) is pleased to submit its response to the Consultation on the Proposed New Licensing Framework for Satellite Service launched by the Independent Communications Authority of South Africa (ICASA) into the licensing of various elements of electronic communications services provided over satellite. Our response is contained in Enclosure 1 hereto.

SpaceX commends ICASA for this timely consultation and welcomes the opportunity to discuss its response with the Authority at earliest convenience.

Yours faithfully,

Brandi Oliver
Manager, Market Access
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Enclosure

1. SpaceX response to Consultation on the Proposed New Licensing Framework for Satellite Service



Enclosure 1: SpaceX Response to Consultation on the Proposed New Licensing Framework for Satellite Service

Introduction and Overview

SpaceX is pleased to submit its response to the consultation launched by the Independent Communications Authority of South Africa (ICASA) into the licensing of various elements of electronic communications services provided over satellite.

The submission is set out in the following way:

- In **section 1** we address key questions raised in the ICASA Consultation.
- In **section 2** we examine the licensing framework for electronic communications networks and services.
- In **section 3** we consider the powers and duties of ICASA.
- In **section 4** we review policies that are relevant to this consultation, at a high level.



1. Response to Questions in ICASA's Consultation

QUESTION 1

These are the policy principles from the ATU that ICASA seeks to align with.

Kindly provide comment(s) on the proposed policy principles and any further recommendations listed in the above section?

SpaceX supports the principles adopted from the ATU position as outlined in this section.

However, we also recommend taking note of recent developments in other countries, such as the USA and UK, where further steps have been taken to streamline and simplify the process of licensing satellite networks. SpaceX takes these into account in its responses to the specific questions on the following pages.

QUESTION 2

Do you agree with the exclusions of radio navigation satellite services, amateur satellite services, earth exploration, space research satellite services and radio astronomy services indicated above and others if applicable? If not, please explain your reasoning and propose an alternative to this proposal.

SpaceX has no comment on the exclusion of radio navigation satellite services, amateur satellite services, earth exploration, space research satellite services and radio astronomy services, except to note that SpaceX recognizes the importance of these services and routinely coordinates with them in providing its services.

SpaceX does; however, believe ICASA should consider authorising additional bands to support satellite services, including:

- 12.7-12.75 GHz
- 13.75-14 GHz
- 14.5-14.75 GHz
- 14.75-14.8 GHz
- 15.43-15.63 GHz
- 24.75-25.25 GHz
- 29.1-29.5 GHz
- 30-31 GHz
- 50.4-51.4 GHz
- 51.4-52.4 GHz
- E-band (71.0-76.0 and 81.0-86.0 GHz)
- 90 GHz bands (92-94, 94.1-95, 95-100, 102-109.5, 111.8-114.25 GHz)

To the degree that these bands are not in the national or international tables, SpaceX urges ICASA to consider adopting them into the national framework, consistent with principles in the Radio Regulations. Doing so will enable South Africa to take advantage of the latest and most advanced satellite services in the world.

QUESTION 3

Do you agree with the proposed approach of having a separate licence/authorisation (where applicable) for each segment of the Satellite Communication value chain? Please elaborate.

SpaceX has no issue with the approach to separately authorise satellite gateway earth stations and user terminal networks. Regarding each, ICASA should enact a “blanket license” regime as later discussed.

Regarding the space segment registration, as discussed later, this would seem unnecessary as a separate step, and instead can simply be included as a notification of the system(s) used with respect to earth station and/or user terminals when an applicant seeks authorisation of either.

QUESTION 4

Please provide your comments on the proposals in the preceding paragraph and the duration of the Gateway Earth Station licences.

SpaceX notes that while ICASA refers to the Q and V-bands as operating “in the future” when, in fact, these bands are being used today by gateway earth stations. Additionally, the E-band (71-76 and 81-86 GHz) is providing high capacity backhaul for satellite services. These bands should be included in the licensing regime today, along with the other bands noted in response to Question 2.

SpaceX supports a minimum licensing period of 10 years, as this aligns with international best practices.

QUESTION 5

Please comment on the above-mentioned alternative proposals to levy the spectrum fees for Gateway Earth Stations and indicate your preferred option. The Authority understands that there are other spectrum fee calculation methodologies used elsewhere in the world. Please give details of the

methodologies which you believe would be most suitable for South Africa.

While it is true that modern satellite systems need access to broad spectrum bands to support backhaul of traffic through gateway earth stations, it is important to note that this need doesn't encumber a large geographic area. That is, while gateway earth stations may require access to many MHz of spectrum, this does not preclude other uses within a reasonable proximity (which varies depending on geography or shielding that is put in place). As such, this spectrum is highly sharable among many operators. Because the preclusive effect of any single gateway earth station site is low, SpaceX believes a cost-recovery approach is most appropriate.

Administratively pricing the fees charged for Gateway Earth Stations and User Station Network Licenses to cover the actual costs of spectrum management by the Authority—rather than seek to achieve revenue targets—is a global best practice supported by National Economic Research Associates (NERA) in its 1 November 2024 report, “How to Price Satellite Spectrum”.¹ SpaceX has included this report in its entirety as Annex B.

While SpaceX does not believe bandwidth (per MHz) should be a factor used in setting ground station fees, we note that gateway earth stations do not operate like traditional mobile FDD stations in that uplink and downlink are not equally paired, so applying any formula that requires “per MHz paired” would not be appropriate as the spectrum used for uplink and downlink isn’t symmetric. A per-MHz pricing structure would, for most operators, result in exorbitantly high fees that hamstring growth for incumbents and repelling new entrants, thus diluting investment, competition, and by extension, service quality.

SpaceX agrees with applying fees per license rather than an individual gateway earth station antenna level, recognizing that a single gateway earth station site may include multiple antennas connecting to the same satellite system.

QUESTION 6

Kindly comment on the section above and on the proposal for blanket licensing with a fee for a set number of terminals under a new proposed licence regime to be referred to as “Satellite User Station Network Licence”. If possible, please provide a breakdown of the number of terminals with the corresponding spectrum fee values in South African Rands.

SpaceX supports the adoption of a blanket license approach. However, in line with global best practices, we believe a single, uniform fee should be applied, regardless of the number of user terminals or the frequency bands utilized.

Given the concept of a blanket network authorisation, SpaceX does not believe it is appropriate to collect an annual list of individual customers and the type of equipment installed.

¹ National Economic Research Associates, “How to Price Satellite Spectrum”, 1 November 2024

When implementing a general blanket license fee, to promote the goals of broadband connectivity, a single fee for a network license that is aimed at regulatory cost-recovery is most appropriate (please refer to the NERA report in Annex B). A variable per-user terminal fee will only add additional financial burdens for service providers and create a disincentive to expand service. The authorisation should encompass fixed terminals and earth stations in motion, as most modern terminals can operate as either a fixed or an ESIM terminal.

QUESTION 7

Kindly comment on the appropriateness of using regulation 37 of the ICASA radio regulations ("Recognition of licences issued by other countries") to recognize ESIM licences issued by other countries.

SpaceX agrees that ESIM terminals on aircraft - and we would expand this to include any land, maritime or aviation terminal - that are licensed in another jurisdiction and are temporarily visiting South Africa, should be exempt from licensing.

QUESTION 8

Please provide your comments and details of the best practices in other jurisdictions to fulfill the intentions of the Authority as indicated in the above section. Furthermore, considering the provision set out in the Astronomy Geographic Advantage (AGA) Act of 2007, and the requirements of the Radio Quiet Zone, what measures and techniques do you propose to be employed in mitigating the possible interference that may be caused by the satellites within the Astronomy radio frequency bands in South Africa?

SpaceX believes the practice proposed for the space segment authorisation is overly burdensome and unnecessary. As part of either the ground station or satellite user station network licence application, the applicant can simply provide the pertinent information relating to the ITU filing and the national authorisation for the system(s). The relevant technical information and data will be contained in these filings, so it would be unnecessary to collect again. ICASA could then require the applicant to certify they will comply with protections for the Radio Astronomy Advantage Area and Articles 21 and 22 of the Radio Regulations, as appropriate.

QUESTION 9

Please provide proposals on the role the Satellite operators can play in ensuring that broadband connectivity reaches the areas of the country in terms of community networks with Satellite connectivity as a backhaul. Kindly provide a regulatory solution that can be applied by Satellite operators to address the shortcomings of terrestrial networks in providing to unserved and underserved areas of the country. This may include collaboration with government programs to reach out to those unserved and underserved areas of the country.

High-speed, low-latency satellite services can play a significant role in eliminating – not just alleviating – coverage gaps. These services can:

- Provide direct-to-consumer satellite broadband anywhere in South Africa
- Provide backhaul service to mobile network operators (MNOs) to allow base station deployment in areas where backhaul isn't currently available or economically feasible
- Provide direct-to-cell service, for example, through a partnership with MNOs to provide service to existing MNO customers on unmodified handsets through an agreement to use the MNO's licensed spectrum in areas where terrestrial service is not currently offered

2. The Licensing Framework in South Africa

One subject this consultation does not address is the ability for all satellite operators to hold individual licenses to provide their services directly to the consumer. Under the current South African regulatory system, companies providing services directly to end-users must hold I-ECNS and I-ECS licenses, which require at least 30% shareholding by historically disadvantaged groups (HDGs). However, many foreign satellite operators, particularly those with direct-to-consumer business models, have global policies that prevent local shareholding, thus excluding them from the South African market. This holds true even when these operators are willing to comply with B-BBEE requirements and invest in initiatives that directly benefit the target communities.

By aligning the licensing and ownership regulations with the ICT Sector Code—which recognizes equity equivalent programs as an alternative to local shareholding—ICASA could remove a significant barrier to foreign satellite operators. This would not only increase foreign investment in South Africa but would also create broader industry benefits, supporting innovation, competition, and long-term growth.

- 2.1 In keeping with regulatory practice around the world, the construction and operation of electronic communications networks and the provision of services over those networks are authorized in some form by a national regulatory authority. The licensing framework for South Africa is defined in Chapter 3 of the ECA and consists in three primary forms of licence, namely the electronic communications network service (ECNS) licence, the electronic communications service (ECS) licence, and the broadcasting service licence. This consultation is concerned with aspects of the first two.
- 2.2 Section 5(3)(e) empowers ICASA to determine which types of services (including network services) may require an individual licence, which decision should be based on whether ICASA finds that those services have significant impact on socio-economic development. However, there is no time limit nor are there any other restrictions on the determination of other categories of licences.
- 2.3 Section 5(7) empowers ICASA to make regulations on any matter relating to the licensing process, if it adheres to (“must”) the provisions of section 5(9)(a) and (b). For purposes of this consultation, only (b) is relevant and it provides that in granting a licence, ICASA must promote broad-based black economic empowerment including the empowerment of women and the youth and persons with disabilities, in accordance with the requirements of the ICT Charter. We will return to this provision shortly.
- 2.4 Section 5(12) of the ECA provides that a licence will confer on the holder the privileges and will subject the holder to the obligations provided for in the Act and specified in the licence. This ties in well with section 8 of the ECA which sets out the terms and conditions for licences, which may include universal service and access obligations, and this is repeated in section 8(4). ICASA may also include provisions in licences that are consistent with the country’s international obligations and the public interest in facilitating and maintaining a competitive electronic communications

environment. Section 9(7) of the ECA empowers ICASA to impose on any applicant “any other specific terms and conditions resulting from undertakings made by the applicant”.

2.5 Satellite services are not restricted by geographic boundaries in the sense that a satellite footprint may cover more than one country. Traditionally, satellite ownership was held by large groups of operators, in part because of the cost, but also because of the ‘international’ nature of the service. It is therefore important that we consider the ownership obligations in South African licences as ICASA has specifically noted that any entity applying for a licence to provide services into South Africa will need an individual ECNS licence.

2.6 Section 9(2)(b) is worded in such a way that ICASA is obliged to include one of three provisions, two of which relate to ownership. The clause can be broken-down as follows:

- ...include the percentage of equity ownership to be held by persons from historically disadvantaged groups, which must not be less than 30%; or
- ...such other conditions or
- ...such higher percentage as may be prescribed under section 4(3)(k) of the ICASA Act.

Arguably the second two bullet points may be linked in the sense that ICASA could determine “other conditions” and a percentage of equity ownership that is higher than 30% in terms of the ICASA Act. “other conditions” need not, however, relate to equity.

2.7 This is because, as we have recorded in paragraph 2.3. above, this section must be read with section 5(7) which is clear as to its terms – ICASA must adhere to the provisions of the “ICT Charter”. This term is defined in the ECA as “the ICT Sector Charter, a sector code on broad-based black economic empowerment issued in terms of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003)”.

2.8 It is commonly agreed that what is meant is the ICT Sector Code, which is the Code of Good Practice published by the Department of Trade, Industry and Competition (DTIC) under the Broad-Based Black Economic Empowerment Act, 2003 (BBBEE Act) for the ICT sector.

2.9 This interpretation is underscored by section 4(3)(k) of the ICASA Act, which provides that ICASA “may make regulations on empowerment requirements to promote broad-based black economic empowerment”.

2.10 There is no need to traverse all the provisions of the BBBEE Act or the ICT Sector Code in this submission, although we will do so if it would be helpful, but the purpose of the analysis is to indicate that although ICASA has also published Regulations in respect of the Limitations of Control and Equity Ownership by

Historically Disadvantaged Groups (HDG) and the application of the ICT Sector Code² (Ownership Regulations), and amended them, there are numerous aspects of these Regulations that do not accord with the ICT Sector Code or the BBBEE Act. ICASA itself recognizes this as it has yet to bring certain provisions within the Regulations into effect as it requires the approval of the DTIC to vary the application of the ICT Sector Code in regulations.

2.11 It is our view that ICASA has erred in limiting the type of contributions that may be made and should be measured for the purpose of considering whether and to what extent a licensee has met the requirements of the ICT Sector Code and the provisions of section 9(2)(b), by reference only to ownership. Empowerment as envisaged in the BBBEE Act, and the ICT Sector Code is far broader and contributions other than equity are acceptable.

2.12 The ECA also offers ICASA numerous ways in which it might oblige licensees to contribute to the transformation of the sector including in the giving of undertakings and the imposition of universal service commitments. Any such licence conditions could and, in our view, should, be framed with reference to national policy goals and the best way in which to achieve them, and not only to ownership.

2.13 This is especially true for satellite service providers whose ability to provide 100% coverage is undisputed. The SpaceX/Starlink track record in other African countries speaks for itself, and it and other multinational satellite operators could make a meaningful contribution to digital transformation and achieving the SA Connect broadband targets, while also making a significant contribution to black economic empowerment. On 20 September this year, the Business Day quoted Remgro's CEO, Jannie Durand, as flagging "...the regulatory costs of doing deals as a deterrent to doing business and attracting international investment, saying if the merger of the group's fibre assets in Vumtel with those of Vodacom had gone ahead 18 months ago the group would already have spent R3bn-R4bn of capex to roll out connectivity in areas of SA where it is needed"³. Ownership restrictions are one such regulatory obstacle.

2.14 ICASA has made it clear that applications for any of the three types of licence that it proposes to make available will not permit services to be provided without the holder also having an individual ECNS licence.

2.14.1 The implication is clear – if ICASA persists in this requirement and in enforcing the Limitations on Ownership Regulations, then it will have the effect of excluding international investment by emerging technologies and in the short term NGSO satellite operators.

2.14.2 We have also noted recent pronouncements by the Minister in relation to empowerment, in which he says, "*Broadband access makes it easier for*

² Gazette 44382 of 31 March 2021.

³ [Regulatory hurdles hinder investment, says Remgro \(businesslive.co.za\)](https://www.businesslive.co.za). Remgro Ltd is a listed company with headline earnings in the year ended 2024 of R5.6bn.

people to start businesses, grow businesses, seek employment, work remotely, and market goods and services. Giving millions of South Africans access to broadband would, therefore, constitute one of the biggest empowerment programmes the South African government has ever undertaken... Equity equivalents, recognised in other sectors, provide an avenue for factoring in alternative ways for companies to make an impact on South Africa's socioeconomic development...Policy clarity on the recognition of equity equivalence schemes has long been sought by players in the ICT industry. This will provide the certainty necessary to attract increased investment in ICT and accelerate universal internet access."⁴

- 2.14.3 Inward investment, for example by satellite operators such as Starlink, will require some rethinking by ICASA in relation to its empowerment requirements, which are otherwise out of step with national policy and in particular, the ICT Sector Code.

⁴ [Malatsi looks to untangle BEE red tape in ICT | ITWeb](#) (October 2024)

3. ICASA's Powers and Duties

3.1 ICASA is created by the ICASA Act, 2000 as amended, and its powers and duties are set out in this Act and in the Electronic Communications Act, 2005 (ECA). ICASA can be described as a ‘creature of statute’. It has a certain amount of discretion within defined parameters. The overriding requirement of the statutes is that ICASA act in the “public interest”.

3.2 The “public interest” is not defined in any of the statutes, but it is generally considered to be the welfare or wellbeing of the general public; but in the context of making decisions on narrowly defined matters, it can also mean a decision made that on balance, favours the interests of a specific part of or the general public.

3.3 The ECA contains an important set of objects in relation to the exercise of ICASA’s powers and duties. In relation to this consultation, we believe the following to be of relevance:

- 3.3.1 the promotion of the universal provision of electronic communications networks and electronic communications services and connectivity for all (section 2(c));
- 3.3.2 encouraging investment, including strategic infrastructure investment, and innovation in the communications sector (section 2(d));
- 3.3.3 promoting competition within the ICT sector (section 2(f));
- 3.3.4 the promotion of broad-based black economic empowerment, with particular attention to the needs of women, opportunities for youth and challenges for persons with disabilities (section 2(h));
- 3.3.5 providing assistance and support towards human resources development within the ICT sector (section 2(l));
- 3.3.6 ensuring the provision of a variety of quality electronic communications services at reasonable prices (section 2(m));
- 3.3.7 promoting the interests of consumers with regard to the price, quality and the variety of electronic communications services (section 2(n));
- 3.3.8 developing and promoting SMMEs and cooperatives (section 2(p));
- 3.3.9 refraining from undue interference in the commercial activities of licensees while taking into account the electronic communication needs of the public (section 2(y)); and
- 3.3.10 promoting stability in the ICT sector (section 2(z)).

3.4 ICASA also has powers in relation to licensing. These are set out in sections 4(3)(e), (j), and (k) and section 4(3A) of the ICASA Act. This latter section obliges ICASA, in exercising its powers and performing its duties, to consider policy and policy directions issued by the Minister. In the ECA, ICASA’s licensing powers and duties are largely contained in section 5. We consider these in part 4 below.

3.5 ICASA’s powers and duties in relation to regulations are captured in section 4 of the ECA. ICASA may make regulations concerning any matter of procedure or form which

may be necessary or expedient to prescribe for the purposes of the ECA or ICASA Act, and -

- 3.5.1 under section 4(2)(a), different regulations may be prescribed for different licences;
- 3.5.2 under section 4(2)(b), different regulations may be prescribed for different uses of frequency spectrum.

4. Existing Policies that Affect the ICT Sector

4.1 There are a significant number of policies of national application which also relate to the ICT sector, as well as sector-specific ICT policies. The list we have put together is therefore lengthy and we attach it to this submission as *Annexure A*.

4.2 Each policy is likely to have been drafted with a view to achieving a broader goal, and in the last 15 years, the primary goal appears to have been the ubiquitous deployment of and universal access to broadband networks and services.

4.3 This is in keeping with the international trend towards achieving several targets that have been set at the global level, including:

- 4.3.1 the United Nation's Sustainable Development Goals⁵, which form part of the 2030 Agenda for Sustainable Development⁶;
- 4.3.2 digital transformation as one of the ITU-D's priorities, which provides that "*The focus of this priority is on:*
(1) the development and use of telecommunications and ICTs, as well as applications and services, to close the digital divide and empower people and societies for sustainable development; and
(2) support to the ITU-D membership in fostering digital transformation through ICT entrepreneurship and increased ICT innovation in the ICT ecosystem, while encouraging the empowerment of grassroots stakeholders and creating new opportunities for them in the telecommunication and ICT sector".⁷

4.4 The ITU summarises what we believe to be at the core of the South African ICT policies over the years, which we have reproduced here. It also bears on what we wish to present for ICASA's consideration in the context of this consultation.

⁵ [THE 17 GOALS | Sustainable Development \(un.org\)](#)

⁶ [Transforming our world: the 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs \(un.org\)](#)

⁷ [Digital Transformation \(itu.int\)](#)

The Challenge: persistent digital divide

- Some people with specific needs (i.e. associated to differences of age, gender, ability, socioeconomic status and geography) may have barriers to access and use digital information and services.
- Substantial digital divides persist between countries. Indeed, nearly 87 per cent of people were using the Internet in developed countries in 2019, compared with 47 per cent in developing countries.
- Digital divides are also evident within countries. Men, urban residents and young people are more likely to be online than women, rural dwellers and older persons. The digital gender gap is more pronounced in developing countries and substantial in least developed countries.

The Solution: ensuring inclusive, equal access and use of ICTs for all

- By supporting Member States, sector members and academia in the formulation and implementation of policies and strategies on digital inclusion, as well as awareness raising and advocacy, sharing good practices and knowledge, building capacity and the development products/services.
- By supporting specific local communities (children, youth, older persons, women, persons with disabilities and indigenous people) through multi-stakeholder partnerships, collaborations and initiatives, to implement scalable roadmaps, actions, activities, and projects, to reduce the digital divide and towards more inclusive, equal access and use of ICTs for all.

4.5 Over the years, South Africa has committed to numerous international treaties and agreements, consistently aligning its regulatory environment with global best practices. Technological advancements within the country have prompted changes to the regulatory framework, some of which have lagged innovation, while others have anticipated future developments. The ECA was designed as a technology-neutral law and the importance of this neutrality emphasized in various official pronouncements and policies.

4.6 Sector-specific and national policies have recognised the potential impact of new technologies on economic development and growth, leading the government to commit to several targets, initiatives, and plans. These commitments are reflected in the National Development Plan ("NDP") (published in 2012) and operationalised through the National Broadband Policy, SA Connect (published in 2013). These policies aim to ensure that affordable, high-speed internet services are accessible to all, laying the groundwork for economic growth, job creation, and improved social services. A list of key policies is included in a list attached to this submission, for ease of reference.

4.7 Among the primary objectives is the goal of achieving nationwide broadband connectivity at minimum speeds⁷, particularly in underserved areas, as part of a broader push for universal access by 2030. SA Connect provides a comprehensive framework for this rollout, setting specific targets for public institutions, schools, clinics, and the general public to ensure widespread, affordable connectivity. This policy includes the targets outlined in the table below.

Target	Penetration measure	Baseline (2013)	By 2016	By 2020	By 2030	Progress ⁸
Broadband access in Mbps user experience	% of population	33.7% ⁹ internet access	50% at 5 Mbps	90% at 5Mbps 50% at 100Mbps	100% at 10Mbps 80% at 100Mbps	79% of households connected (2023)*; 52.3 Mbps (mobile download speeds)**
Schools	% of schools	25% connected	50% at 10 Mbps	100% at 10 Mbps 80% at 100Mbps	100% at 1Gbps	67% of schools connected (2022)***
Health facilities	% of health facilities	13% connected	50% at 10Mbps	100% at 10 Mbps 80% at 100Mbps	100% at 1Gbps	87% of primary health care facilities connected (2023)****
Government facilities	% of government offices		50% at 5Mbps	100% at 10Mbps	100% at 100Mbps	

Table 1: SA Connect Targets

Source: FTI adaptation of Department of Communications and Digital Technologies (DCDT). *South Africa Connect: Creating Opportunities, Ensuring Inclusion. South Africa's Broadband Policy*, 20 November 2013.
 *Statistics South Africa (StatsSA). General Household Survey 2023. **Ookla, Speedtest Global Index, 2024. South Africa median speed, September 2024. Available at: [online](#). ***Department of Basic Education. Annual Performance Plan 2024/25, available [online](#); ****Parliamentary Monitoring Group, 3 November 2023. Question NW3319 to the Minister of Health, available [online](#).

4.8 The benefits that satellite can deliver can contribute in a meaningful way to achieving the 2030 goals. This consultation is therefore of the utmost importance, and it is vital that its outcome supports national policy goals.

⁸ Progress figures represent an estimate of the country's progress towards its National Broadband Policy targets.

⁹ Research ICT Africa, 2012 ICT Access and Use Survey

Annexure A: South African Policies for the ICT Sector

Policy document
Ministerial determination under the ECA with regard to universal access to and the universal provision of ECS and ECNS, 2010
National Development Plan, 2012 (towards 2030)
ICASA Under-serviced Areas Definition Regulation, 2012
National Broadband Policy (SA Connect), 2013
Policy direction to ICASA on effective competition in broadband markets and the reduction of data costs, 2016
National Integrated ICT Policy White Paper, 2016
Final ICT SMME Development Strategy, 2017
Terms of reference for the Presidential Commission on the 4 th Industrial Revolution, 2019 and the First Report of the Commission, 2020
Minutes of the Parliamentary Monitoring Group, 2019
National Digital Health Strategy 2019-2024
Revised Strategic Plan 2020-2025 for USAASA
Discussion Paper on 4IR Youth Expo (June 2023)
Competition Commission Data Services Market Inquiry (December 2019)
ICASA Mobile Broadband Service Inquiry (March 2021)

[za-government-gazette-dated-2010-02-08-no-32939.pdf \(gazettes.africa\)](#)
[35675_10-9_ICASA_Layout 1 \(gazettes.africa\)](#)
[DCDT - Gazettes - Government Gazette no. 33377: SA Broadband Policy](#)
[DCDT - Gazettes - Government Gazette No.39781: Policy Direction to the Independent Communications Authority of South Africa on Effective Competition in Broadband Markets and the Reduction of Data Costs](#)
[DCDT - Gazettes - Government Gazette No. 41243: Final ICT SMME Development Strategy](#)
[DCDT - Gazettes - Government Gazette No.42388: Presidential Commission on Fourth Industrial Revolution: Members and Terms of Reference](#)
[Report of the Presidential Commission on the 4th Industrial Revolution \(\[www.gov.za\]\(#\)\)](#)
[The state and impact of the Fourth Industrial Revolution \(\[destea.gov.za\]\(#\)\)](#)
[Fourth Industrial Revolution \(4IR\) Colloquium | PMG](#)
[national-digital-strategy-for-south-africa-2019-2024-b.pdf \(health.gov.za\)](#)
[static.pmg.org.za/REVISED_USAASA_STRATEGIC_PLAN_2020-2025_Audited_005_002.pdf](#)
[Discussion_Paper_4IR.pdf \(parliament.gov.za\)](#)
[Data Services Market Inquiry: Final Report](#)
[Findings Document on Mobile Broadband Services Inquiry](#)

Annex B: National Economic Research Associates, "How to Price Satellite Spectrum", 1 November 2024